



Scientific Drilling
Directional Drilling Operations

Samson Resources Company

**La Plata County, C.O.
SEC 11-T32N-R7W
Lucero 32-7-11 #2**

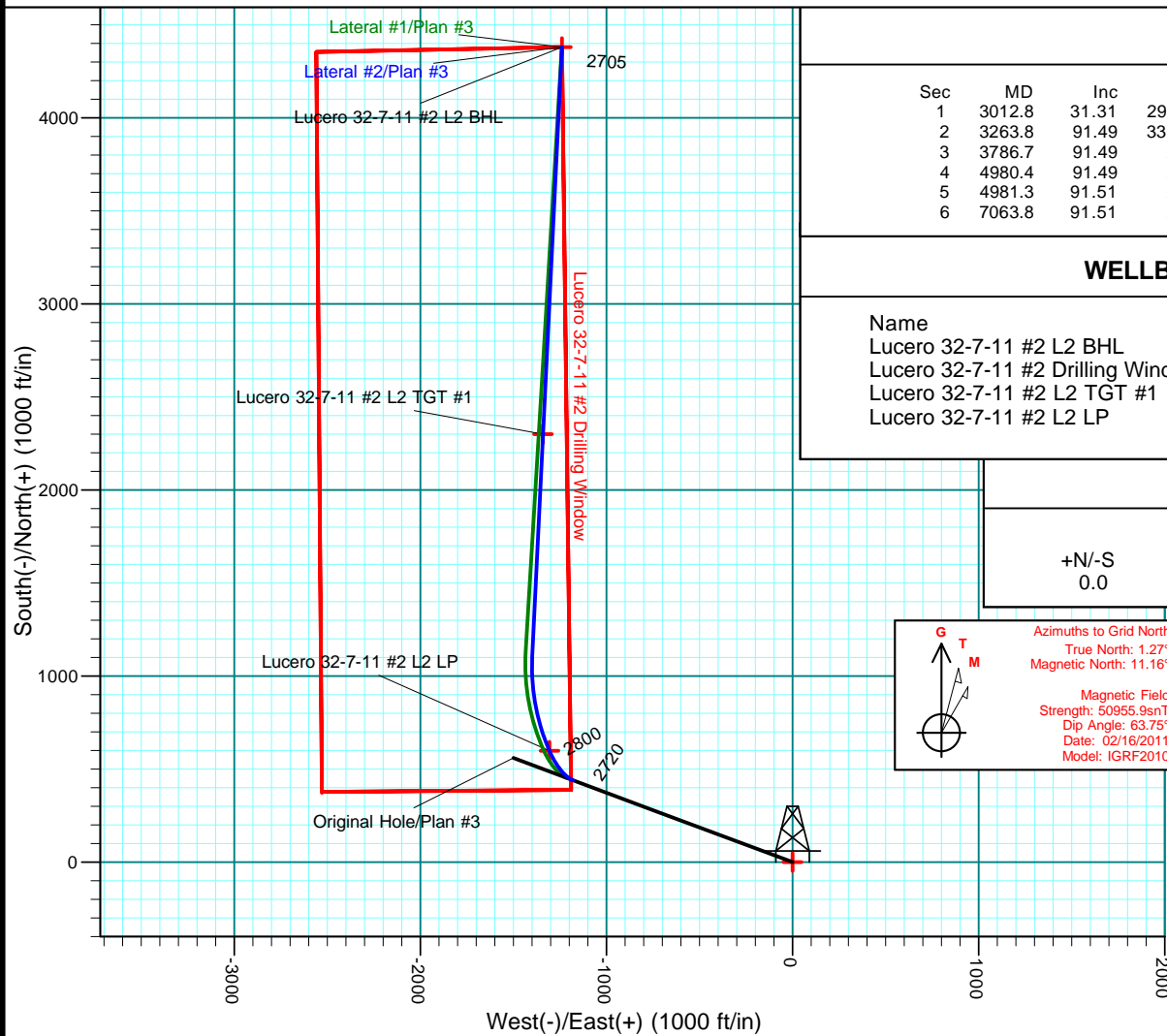
Lateral #2

Plan: Plan #3

Standard Planning Report

25 May, 2011





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	3012.8	31.31	290.47	2685.7	440.0	-1178.4	0.00	0.00	744.0	
2	3263.8	91.49	336.64	2805.0	598.3	-1305.6	28.00	50.00	931.0	Lucero 32-7-11 #2 L2 LP
3	3786.7	91.49	2.79	2791.1	1108.1	-1398.2	5.00	89.64	1446.8	
4	4980.4	91.49	2.79	2760.0	2300.0	-1340.1	0.00	0.00	2577.9	Lucero 32-7-11 #2 L2 TGT #1
5	4981.3	91.51	2.79	2760.0	2300.9	-1340.1	2.00	6.42	2578.7	
6	7063.8	91.51	2.79	2705.0	4380.3	-1238.7	0.00	0.00	4552.1	Lucero 32-7-11 #2 L2 BHL

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Lucero 32-7-11 #2 L2 BHL	2705.0	4380.3	-1238.7	1141621.99	2392729.95	Point
Lucero 32-7-11 #2 Drilling Window	2746.0	0.0	0.0	1137241.51	2393968.66	Polygon
Lucero 32-7-11 #2 L2 TGT #1	2760.0	2300.0	-1340.1	1139541.61	2392628.51	Point
Lucero 32-7-11 #2 L2 LP	2805.0	598.3	-1305.6	1137839.81	2392662.97	Point

WELL DETAILS: Lucero 32-7-11 #2

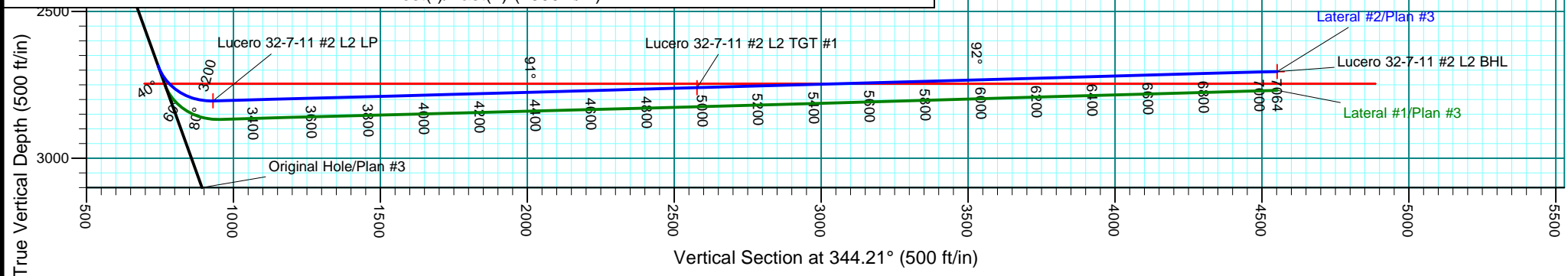
		Ground Level: 6303.3			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1137241.51	2393968.66	37° 1' 30.288 N	107° 34' 33.528 W

PROJECT DETAILS

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Southern Zone
System Datum: Mean Sea Level

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Lucero 32-7-11 #2, Grid North
Vertical (TVD) Reference: AWS 507 @ 6315.3ft (12' DF + 6303.3' GL)
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: AWS 507 @ 6315.3ft (12' DF + 6303.3' GL)
Calculation Method: Minimum Curvature



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Lucero 32-7-11 #2
Company:	Samson Resources Company	TVD Reference:	AWS 507 @ 6315.3ft (12' DF + 6303.3' GL)
Project:	La Plata County, C.O.	MD Reference:	AWS 507 @ 6315.3ft (12' DF + 6303.3' GL)
Site:	SEC 11-T32N-R7W	North Reference:	Grid
Well:	Lucero 32-7-11 #2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #2		
Design:	Plan #3		

Project	La Plata County, C.O.		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Southern Zone		Using geodetic scale factor

Site	SEC 11-T32N-R7W				
Site Position:		Northing:	1,137,161.82 usft	Latitude:	37° 1' 29.496 N
From:	Lat/Long	Easting:	2,393,949.37 usft	Longitude:	107° 34' 33.744 W
Position Uncertainty:	0.0 ft	Slot Radius:	6-1/8 "	Grid Convergence:	-1.27 °

Well	Lucero 32-7-11 #2, FC HZ Well					
Well Position	+N-S	79.7 ft	Northing:	1,137,241.51 usft	Latitude:	37° 1' 30.288 N
	+E-W	19.3 ft	Easting:	2,393,968.67 usft	Longitude:	107° 34' 33.528 W
Position Uncertainty		3.5 ft	Wellhead Elevation:		Ground Level:	6,303.3 ft

Wellbore	Lateral #2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	02/16/11	9.89	63.75	50,956

Design	Plan #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	3,012.8
Vertical Section:	Depth From (TVD) (ft)	+N-S (ft)	+E-W (ft)	Direction (°)
	0.0	0.0	0.0	344.21

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
3,012.8	31.31	290.47	2,685.7	440.0	-1,178.4	0.00	0.00	0.00	0.00	
3,263.8	91.49	336.64	2,805.0	598.3	-1,305.6	28.00	23.98	18.39	50.00	Lucero 32-7-11 #2 I
3,786.7	91.49	2.79	2,791.1	1,108.1	-1,398.2	5.00	0.00	5.00	89.64	
4,980.4	91.49	2.79	2,760.0	2,300.0	-1,340.1	0.00	0.00	0.00	0.00	Lucero 32-7-11 #2 I
4,981.3	91.51	2.79	2,760.0	2,300.9	-1,340.1	2.00	1.99	0.22	6.42	
7,063.8	91.51	2.79	2,705.0	4,380.3	-1,238.7	0.00	0.00	0.00	0.00	Lucero 32-7-11 #2 I

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Lucero 32-7-11 #2
Company:	Samson Resources Company	TVD Reference:	AWS 507 @ 6315.3ft (12' DF + 6303.3' GL)
Project:	La Plata County, C.O.	MD Reference:	AWS 507 @ 6315.3ft (12' DF + 6303.3' GL)
Site:	SEC 11-T32N-R7W	North Reference:	Grid
Well:	Lucero 32-7-11 #2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #2		
Design:	Plan #3		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	3.50	290.47	199.9	1.1	-2.9	1.8	3.50	3.50	0.00
300.0	7.00	290.47	299.5	4.3	-11.4	7.2	3.50	3.50	0.00
351.0	8.78	290.47	350.0	6.7	-18.0	11.4	3.50	3.50	0.00
400.0	8.78	290.47	398.4	9.3	-25.0	15.8	0.00	0.00	0.00
431.0	8.78	290.47	429.1	11.0	-29.4	18.6	0.00	0.00	0.00
500.0	11.20	290.47	497.0	15.2	-40.7	25.7	3.50	3.50	0.00
600.0	14.70	290.47	594.5	23.0	-61.6	38.9	3.50	3.50	0.00
700.0	18.20	290.47	690.4	32.9	-88.2	55.7	3.50	3.50	0.00
800.0	21.70	290.47	784.3	44.8	-120.1	75.8	3.50	3.50	0.00
900.0	25.20	290.47	876.1	58.8	-157.4	99.4	3.50	3.50	0.00
1,000.0	28.70	290.47	965.2	74.6	-199.9	126.2	3.50	3.50	0.00
1,074.6	31.31	290.47	1,029.8	87.7	-234.8	148.2	3.50	3.50	0.00
1,100.0	31.31	290.47	1,051.5	92.3	-247.2	156.1	0.00	0.00	0.00
1,200.0	31.31	290.47	1,136.9	110.5	-295.9	186.8	0.00	0.00	0.00
1,300.0	31.31	290.47	1,222.4	128.6	-344.5	217.5	0.00	0.00	0.00
1,400.0	31.31	290.47	1,307.8	146.8	-393.2	248.3	0.00	0.00	0.00
1,500.0	31.31	290.47	1,393.2	165.0	-441.9	279.0	0.00	0.00	0.00
1,600.0	31.31	290.47	1,478.7	183.2	-490.6	309.7	0.00	0.00	0.00
1,700.0	31.31	290.47	1,564.1	201.3	-539.3	340.5	0.00	0.00	0.00
1,800.0	31.31	290.47	1,649.5	219.5	-588.0	371.2	0.00	0.00	0.00
1,900.0	31.31	290.47	1,735.0	237.7	-636.7	402.0	0.00	0.00	0.00
2,000.0	31.31	290.47	1,820.4	255.9	-685.3	432.7	0.00	0.00	0.00
2,100.0	31.31	290.47	1,905.9	274.0	-734.0	463.4	0.00	0.00	0.00
2,200.0	31.31	290.47	1,991.3	292.2	-782.7	494.2	0.00	0.00	0.00
2,300.0	31.31	290.47	2,076.7	310.4	-831.4	524.9	0.00	0.00	0.00
2,400.0	31.31	290.47	2,162.2	328.6	-880.1	555.7	0.00	0.00	0.00
2,410.6	31.31	290.47	2,171.2	330.5	-885.3	558.9	0.00	0.00	0.00
Lucero 32-7-11 #2 Drilling Window									
2,500.0	31.31	290.47	2,247.6	346.7	-928.8	586.4	0.00	0.00	0.00
2,600.0	31.31	290.47	2,333.0	364.9	-977.5	617.1	0.00	0.00	0.00
2,700.0	31.31	290.47	2,418.5	383.1	-1,026.1	647.9	0.00	0.00	0.00
2,800.0	31.31	290.47	2,503.9	401.3	-1,074.8	678.6	0.00	0.00	0.00
2,900.0	31.31	290.47	2,589.3	419.5	-1,123.5	709.3	0.00	0.00	0.00
3,000.0	31.31	290.47	2,674.8	437.6	-1,172.2	740.1	0.00	0.00	0.00
3,012.8	31.31	290.47	2,685.7	440.0	-1,178.4	744.0	0.00	0.00	0.00
3,020.0	32.64	293.34	2,691.8	441.4	-1,182.0	746.3	28.00	18.45	39.78
3,040.0	36.63	300.27	2,708.3	446.5	-1,192.1	754.1	28.00	19.93	34.67
3,060.0	40.94	305.97	2,723.9	453.4	-1,202.6	763.5	28.00	21.59	28.51
3,080.0	45.50	310.74	2,738.4	461.9	-1,213.3	774.6	28.00	22.76	23.84
3,100.0	50.22	314.81	2,751.9	472.0	-1,224.1	787.3	28.00	23.61	20.32
3,120.0	55.06	318.34	2,764.0	483.5	-1,235.0	801.3	28.00	24.23	17.68
3,140.0	60.00	321.48	2,774.7	496.4	-1,245.9	816.7	28.00	24.68	15.68
3,160.0	65.00	324.31	2,784.0	510.6	-1,256.6	833.2	28.00	25.02	14.18
3,180.0	70.06	326.93	2,791.6	525.8	-1,267.0	850.8	28.00	25.27	13.07
3,200.0	75.14	329.38	2,797.6	542.0	-1,277.1	869.1	28.00	25.44	12.25
3,220.0	80.26	331.72	2,801.9	559.1	-1,286.7	888.1	28.00	25.57	11.69
3,240.0	85.39	333.98	2,804.3	576.7	-1,295.7	907.5	28.00	25.65	11.33
3,260.0	90.52	336.22	2,805.1	594.8	-1,304.1	927.2	28.00	25.68	11.17
3,263.8	91.49	336.64	2,805.0	598.3	-1,305.6	931.0	28.00	25.68	11.15
Lucero 32-7-11 #2 L2 LP									
3,300.0	91.50	338.45	2,804.1	631.8	-1,319.5	967.0	5.00	0.03	5.00
3,400.0	91.52	343.45	2,801.4	726.2	-1,352.1	1,066.7	5.00	0.02	5.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Lucero 32-7-11 #2
Company:	Samson Resources Company	TVD Reference:	AWS 507 @ 6315.3ft (12' DF + 6303.3' GL)
Project:	La Plata County, C.O.	MD Reference:	AWS 507 @ 6315.3ft (12' DF + 6303.3' GL)
Site:	SEC 11-T32N-R7W	North Reference:	Grid
Well:	Lucero 32-7-11 #2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #2		
Design:	Plan #3		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,500.0	91.53	348.45	2,798.7	823.2	-1,376.4	1,166.6	5.00	0.01	5.00
3,600.0	91.53	353.45	2,796.1	921.8	-1,392.1	1,265.9	5.00	0.00	5.00
3,700.0	91.52	358.45	2,793.4	1,021.5	-1,399.1	1,363.7	5.00	-0.01	5.00
3,786.7	91.49	2.79	2,791.1	1,108.1	-1,398.2	1,446.8	5.00	-0.02	5.00
3,800.0	91.49	2.79	2,790.8	1,121.5	-1,397.5	1,459.4	0.00	0.00	0.00
3,900.0	91.49	2.79	2,788.2	1,221.3	-1,392.7	1,554.2	0.00	0.00	0.00
4,000.0	91.49	2.79	2,785.6	1,321.1	-1,387.8	1,648.9	0.00	0.00	0.00
4,100.0	91.49	2.79	2,783.0	1,421.0	-1,382.9	1,743.7	0.00	0.00	0.00
4,200.0	91.49	2.79	2,780.4	1,520.8	-1,378.1	1,838.4	0.00	0.00	0.00
4,300.0	91.49	2.79	2,777.7	1,620.7	-1,373.2	1,933.2	0.00	0.00	0.00
4,400.0	91.49	2.79	2,775.1	1,720.5	-1,368.3	2,028.0	0.00	0.00	0.00
4,500.0	91.49	2.79	2,772.5	1,820.4	-1,363.5	2,122.7	0.00	0.00	0.00
4,600.0	91.49	2.79	2,769.9	1,920.2	-1,358.6	2,217.5	0.00	0.00	0.00
4,700.0	91.49	2.79	2,767.3	2,020.1	-1,353.7	2,312.2	0.00	0.00	0.00
4,800.0	91.49	2.79	2,764.7	2,119.9	-1,348.9	2,407.0	0.00	0.00	0.00
4,900.0	91.49	2.79	2,762.1	2,219.8	-1,344.0	2,501.7	0.00	0.00	0.00
4,980.4	91.49	2.79	2,760.0	2,300.0	-1,340.1	2,577.9	0.00	0.00	0.00
Lucero 32-7-11 #2 L2 TGT #1									
4,981.3	91.51	2.79	2,760.0	2,300.9	-1,340.1	2,578.7	2.00	1.99	0.22
5,000.0	91.51	2.79	2,759.5	2,319.6	-1,339.1	2,596.5	0.00	0.00	0.00
5,100.0	91.51	2.79	2,756.8	2,419.5	-1,334.3	2,691.2	0.00	0.00	0.00
5,200.0	91.51	2.79	2,754.2	2,519.3	-1,329.4	2,786.0	0.00	0.00	0.00
5,300.0	91.51	2.79	2,751.6	2,619.2	-1,324.5	2,880.7	0.00	0.00	0.00
5,400.0	91.51	2.79	2,748.9	2,719.0	-1,319.7	2,975.5	0.00	0.00	0.00
5,500.0	91.51	2.79	2,746.3	2,818.9	-1,314.8	3,070.3	0.00	0.00	0.00
5,600.0	91.51	2.79	2,743.6	2,918.7	-1,309.9	3,165.0	0.00	0.00	0.00
5,700.0	91.51	2.79	2,741.0	3,018.5	-1,305.1	3,259.8	0.00	0.00	0.00
5,800.0	91.51	2.79	2,738.4	3,118.4	-1,300.2	3,354.5	0.00	0.00	0.00
5,900.0	91.51	2.79	2,735.7	3,218.2	-1,295.3	3,449.3	0.00	0.00	0.00
6,000.0	91.51	2.79	2,733.1	3,318.1	-1,290.5	3,544.0	0.00	0.00	0.00
6,100.0	91.51	2.79	2,730.4	3,417.9	-1,285.6	3,638.8	0.00	0.00	0.00
6,200.0	91.51	2.79	2,727.8	3,517.8	-1,280.7	3,733.5	0.00	0.00	0.00
6,300.0	91.51	2.79	2,725.2	3,617.6	-1,275.8	3,828.3	0.00	0.00	0.00
6,400.0	91.51	2.79	2,722.5	3,717.5	-1,271.0	3,923.0	0.00	0.00	0.00
6,500.0	91.51	2.79	2,719.9	3,817.3	-1,266.1	4,017.8	0.00	0.00	0.00
6,600.0	91.51	2.79	2,717.2	3,917.2	-1,261.2	4,112.6	0.00	0.00	0.00
6,700.0	91.51	2.79	2,714.6	4,017.0	-1,256.4	4,207.3	0.00	0.00	0.00
6,800.0	91.51	2.79	2,712.0	4,116.9	-1,251.5	4,302.1	0.00	0.00	0.00
6,900.0	91.51	2.79	2,709.3	4,216.7	-1,246.6	4,396.8	0.00	0.00	0.00
7,000.0	91.51	2.79	2,706.7	4,316.6	-1,241.8	4,491.6	0.00	0.00	0.00
7,063.8	91.51	2.79	2,705.0	4,380.3	-1,238.7	4,552.1	0.00	0.00	0.00
Lucero 32-7-11 #2 L2 BHL									

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Lucero 32-7-11 #2
Company:	Samson Resources Company	TVD Reference:	AWS 507 @ 6315.3ft (12' DF + 6303.3' GL)
Project:	La Plata County, C.O.	MD Reference:	AWS 507 @ 6315.3ft (12' DF + 6303.3' GL)
Site:	SEC 11-T32N-R7W	North Reference:	Grid
Well:	Lucero 32-7-11 #2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #2		
Design:	Plan #3		

Design Targets
Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Lucero 32-7-11 #2 L2 - plan hits target center - Point	0.00	360.00	2,705.0	4,380.3	-1,238.7	1,141,621.99	2,392,729.95	37° 2' 13.314 N	107° 34' 50.002 W
Lucero 32-7-11 #2 Dri - plan misses target center by 1106.0ft at 2410.6ft MD (2171.2 TVD, 330.5 N, -885.3 E) - Polygon	0.00	360.00	2,746.0	0.0	0.0	1,137,241.51	2,393,968.67	37° 1' 30.288 N	107° 34' 33.528 W
Point 1			2,746.0	388.2	-1,189.8	1,137,629.70	2,392,778.78		
Point 2			2,746.0	377.7	-2,528.0	1,137,619.23	2,391,440.54		
Point 3			2,746.0	4,354.9	-2,558.5	1,141,596.60	2,391,410.05		
Point 4			2,746.0	4,380.3	-1,238.7	1,141,621.99	2,392,729.95		
Lucero 32-7-11 #2 L2 - plan hits target center - Point	0.00	360.00	2,760.0	2,300.0	-1,340.1	1,139,541.61	2,392,628.51	37° 1' 52.728 N	107° 34' 50.681 W
Lucero 32-7-11 #2 L2 - plan hits target center - Point	0.00	360.00	2,805.0	598.3	-1,305.6	1,137,839.81	2,392,662.98	37° 1' 35.915 N	107° 34' 49.789 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
351.0	350.0	8 5/8"	8-5/8	12-1/4